## ABSTRACT

A receiving apparatus receives a bitstream that is divided into units encoding a moving picture and includes a stream header indicating how the units are to be decoded. The receiving apparatus estimates the contents of the stream header from the contents of the units, so that decoding of the units can begin before the stream header is received. The receiving apparatus preferably checks for errors in the analysis and decoding of the units, and modifies the estimated stream-header information when an error is discovered. The same unit may be analyzed and decoded repeatedly to hasten the correct estimation of the stream-header information.